

ZE511 and ZE521 Print Engines

Frequently Asked Questions

Q: What is the ZE511 and ZE521 Print Engine?

A: The ZE511 (4 in. print width) and ZE521 (6 in. print width) are the current generation of Zebra's print engine. First made available in May 2021, new features that were introduced on the ZE511 and ZE521 include increased print speed, Zebra's Print DNA™ software suite, full-color LCD touch display, enhanced connectivity options and tool-less print head removal.

Q: What products do the ZE511 and ZE521 replace?

A: The ZE511 replaces the ZE500-4 and the ZE521 replaces the ZE500-6.

Q: Are the ZE511 and ZE521 backwards compatible to the previous generation?

A: The ZE511 and ZE521 are fully backwards compatible with the ZE500 equivalent, in addition to the new features and enhancements enabled by Link-OS®.

Q: What is the optimized rotated barcode print head model?

A: The ZE511 and ZE521 printers will perform as well or better in all current ZE500 applications with existing operating parameters. However, in certain, very specific applications, the barcode may not meet minimum requirements for readability. This potential issue only exists on the ZE511 printer (4 in. print width) when print density is 203 dpi, and the print speed is above 14 ips, and the printer is operated in direct thermal mode and the barcode is rotated.

This relatively uncommon operating scenario is the only instance in which the barcode print quality did not meet our rigorous testing standards. If the customer intends to print rotated barcodes on the ZE511 at speeds greater than 14 ips, in direct thermal mode at a print density of 203 dpi, Zebra recommends the optimized rotated barcode print head model.



Q: What are the differences between the ZE511 and ZE521 and the current ZE500 printers?

A: The ZE511 and ZE521 feature a more intuitive user interface with a rotatable 4.3 in. full-color LCD touch screen that can be remotely located. The display shows printer status at a glance and provides access wizards to quickly setup the printer. Print speed has been increased to up to 18 ips and 600 dpi resolution is available.

The ZE511 and ZE521 are the first Zebra print engines to offer Print DNA. This software suite makes the printers easy to setup, secure, manage and maintain. The print engines now offer field-installable 4 in. or 6 in. RFID capabilities.

The print head is much easier to replace since the printhead is socketed (plugs in) and no tools are required.

The ZE511 and ZE521 have retained the same proven print mechanism and drive system used on the ZE500.

Features	ZE500	ZE511 and ZE521
Print Speed	ZE500-4: 12 ips (203 dpi) 12 ips (300 dpi) ZE500-4: 12 ips (203 dpi) 10 ips (300 dpi)	ZE511: 18 ips* (203 dpi), 14 ips (300 dpi), 6 ips (600 dpi) ZE521: 14 ips (203 dpi), 12 ips (300 dpi)
Connectivity	Parallel, Serial, USB, Ethernet, Wireless	USB, Parallel, Serial, Ethernet, Bluetooth® 4.1, Dual USB Host, Applicator Interface, Dual band 802.11ac Wi-Fi™ and Bluetooth
LCD	Graphical display with simple five-button menu can be rotated or remotely located, up to two meters	Rotatable 4.3-in., full-color LCD touch screen that can be remotely located, up to two meters
Std Memory	16 MB RAM, 64 MB Flash	512 MB Flash; 512 MB SDRAM User Available: 64 MB Flash, 8 MB SDRAM
Maximum Ribbon Length	600M	600M
Print DNA Enabled	No	Yes
Use and Serviceability	Quick change platen and print head Modular drive system Easy to load ribbon	Tool-less, quick-release tab and socketed print head design with no connectors, increased interior work space Quick change platen Modular drive system Easy to load ribbon

*Maximum print speed is 18 ips/457 mm per second at 203 dpi in direct thermal mode. Maximum print speed is 14 ips/356 mm per second at 203 dpi in thermal transfer mode.

Q: Are CAD drawings available for the printer?

A: Yes, 3D CAD models are available in .STEP and .IGES file formats.

Q: Are ZE500 accessories compatible with the ZE511 and ZE521?

A: The ZE511 and ZE521 use the newer connectivity option slot found on all other Zebra Industrial Printers. The communication options are not backwards or forwards compatible.

Q: Can the ZE511 and ZE521 directly replace the ZE500 printer?

A: Yes, the ZE500 can directly replace existing ZE500 printers. The size of the ZE511 and ZE521 are identical to the ZE500. The bolt hole mounting pattern is the same for both printers.

Q: Can the ZE511 and ZE521 use the same labels and ribbons as the ZE500?

A: Yes, the ZE511 and ZE521 will work with the same media and ribbon combinations.

Q: Can a customer purchase a model without the color touch display?

A: No, the only display option is the color touch.

Q: What is the maximum media size?

A: The ZE511 can support media widths from 16 mm (0.625 in.) to 114 mm (4.5 in.) and ribbon width from 25.4 mm (1 in.) to 107 mm (4.2 in.).

The ZE521 can support media widths from 76 mm (3 in.) to 180 mm (7.1 in.) and ribbon width from 25.4 mm (1 in.) to 107 mm (4.2 in.).

Features	ZE511	ZE521
Width	245 mm (9.6 in.)	245 mm (9.6 in.)
Depth	379 mm (14.9 in.)	Depth: 438 mm (17.2 in.)
Height	300 mm (11.8 in.)	Height: 300 mm (11.8 in.)
Weight	14.7 kg (32.5 lbs)	16.1 kg (35.5 lbs)

Q: What sensors does the ZE511 and ZE521 contain?

A:

- Transmissive
- Reflective
- Print head open
- Print head over temperature
- Ribbon
- Ribbon low
- Cover open

Q: Do the ZE511 and ZE521 printers support RFID?

A: Yes, RFID is supported for both print widths. The printer supports encoding tags compatible with UHF EPC Gen 2 V2, ISO/IEC 18000-63 and RAIN RFID protocols.

Q: Can the non-RFID ZE511 or ZE521 models be upgraded to the RFID versions?

A: Yes, both the ZE511 and ZE521 can be upgraded to RFID versions in the field.

Q: Does the printer support USB Host?

A: Yes, we offer two standard USB Host ports, which open a number of new capabilities utilizing the printer, not an additional client, to locally manage files, input data and configure the printer.

- USB mirror is ideal for local, fast replication of firmware, files and configurations for ease of setup and maintenance.
- Print Station supports local data input and form-filling without a client via USB connected scanners and keyboards.
- Print USB file is used to print formats, download firmware and execute files from a USB flash drive (memory stick).
- USB file transfer provides the transfer and storage of files between the printer memory and the USB flash drive.

What is the standard hardware warranty for the ZE511 and ZE521?

A: The warranty varies by region. Please see www.zebra.com/warranty for further details.

For more information, visit www.zebra.com/ze511-ze521



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